

Abstract

It is intended to provide a protein complex and a production process whereby the protein complex can be efficiently produced without lowering its function. It is also intended to provide use of the protein complex in a biosensor, an immobilized enzyme and so on. A protein complex comprising a polyhedral protein having an insect virus encapsulated therein and a target protein having a restricted region of a capsid protein VP3 of cytoplasmic polyhedrosis virus, more specifically, a region which is either a region from the N-terminus to the 40th amino acid residue or a region from the 41st amino acid residue to the 79th amino acid residue as an embedding signal for polyhedron, and a process for producing the same. The polyhedral protein has an effect on improvement in the stability of the target protein, protection thereof or improvement in the preservation properties thereof, or a combination of any of these. The target protein is at least one member selected from the group consisting of fluorescent or light-emitting proteins, enzymes, antigens, antibodies, cytokines, receptors and bioactive proteins. A biosensor characterized in that the above-described protein complex is arranged in dots or lines on a substrate and immobilized thereon.